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EXAMINER

DOUYON, LORNA M

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,301	Applicant(s) LESKOWICZ ET AL.	
	Examiner Lorna M. Douyon	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,9-16,19-28,35-38,45-50,55-58,62-65,67,68,70 and 71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,9-16,19-28,35-38,45-50,55-58,62-65,67,68,70 and 71 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 15, 2008 has been entered.

2. Claims 2, 9-16, 19-28, 35-38, 45-50, 55-58, 62-65, 67-68, 70-71 are pending.

3. The rejection of claims 1-4, 9-30, 35-40, 45-52, 55-71 under 35 U.S.C. 112, first paragraph is withdrawn in view of Applicants' amendment.

4. The rejection of claims 1-4, 15-18, 23-26, 37-40, 47-52, 55-56, 66-67 under 35 U.S.C. 102(b) as being anticipated by Michael (US Patent No. 5,540,864) is withdrawn in view of Applicants' amendment.

Claim Rejections - 35 USC § 112

5. Claims 2, 9-16, 19-28, 35-38, 45-50, 55-58, 62-65, 67-68, 70-71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "said at least one low-volatile non-VOC" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim. In addition, it is suggested that the first occurrence of "VOC" (see line 8) be spelled out, rather than by the end of the claim.

Claim 62 is indefinite for the same reason as in claim 2.

Claim 27 lacks support for "said at least one polyhydric alcohol" (see lines 2-3) with respect to claim 62. Please note that independent claim 62 does not recite "polyhydric alcohol". The same is true for claim **35**.

In claims 11, 12, 21, 22, it is suggested that the phrase "said at least one low-volatile evaporative organic solvent" be replaced with "said at least one low-volatile non-VOC evaporative organic solvent" to be consistent with the rest of the claims.

The remaining claims, being dependent from claims 2 or 62, are rejected as well.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 2, 12, 16, 24, 26, 28, 38, 48, 50, 56, 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumiller et al. (US Patent No. 5,849,681), hereinafter "Neumiller '681".

Neumiller '681 teaches an aqueous cleaning composition for glass surfaces which comprises a combination of at least one nonvolatile organic ether compound and

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at least one anti-streaking alcohol compound, and if desired, an amphoteric surfactant and an organic solvent, the nonvolatile organic ether compound has a formula as those recited and is present in an amount from about 0.1 to about 5.0 total weight percent (see abstract; col. 3, lines 1-65). In Example 3, Neumiller '681 teaches an anti-streak glass cleaning composition comprising 0.1500 wt% decyl (sulfophenoxy) benzenesulfonic acid disodium salt; 0.2000 wt% monoethanolamine; 0.6000 wt% ethylene glycol n-hexyl ether; 0.8000 wt% ethylene glycol n-butyl ether; 3.5000 wt% isopropyl alcohol; 0.2500 wt% propylene glycol and balance soft water (see col. 7, lines 50-65). See also Example 8 under col. 9, lines 10-26. In Example 2, Neumiller '681 teaches a composition comprising 2.5 wt% isopropyl alcohol (see col. 7, lines 31-48). Generally, the pH of the composition is above 7, more preferably from 8-13 and ideally from 10-11 (see col. 7, lines 2-6). Neumiller '681 also teaches that the aqueous glass cleaning composition may also contain one or more surfactants to adjust the surface tension of the composition which include anionic surfactants and amphoteric surfactants (see col. 5, lines 40-48), for example, capryloamphodipropionate (see col. 6, lines 1-2). The surfactant(s) will be employed in the range from 0 to about 5.0 weight percent (see col. 6, lines 9-13). The nonvolatile organic ether compounds of Neumiller '681, e.g. ethylene glycol n-hexyl ether, should have a limited solubility in water of less than 20% and reduces surface tension of the composition to less than 40 dynes/cm because same nonvolatile compounds have been utilized. Neumiller '681, however, fails to specifically disclose a composition comprising an amphoteric surfactant, and the combination of amphoteric and anionic surfactants.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an amphoteric surfactant or the combination of anionic and amphoteric surfactants to the composition to adjust the surface tension of the composition as taught by Neumiller '681.

8. Claims 10, 14, 20, 22, 36, 46, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumiller '681 as applied to the above claims, and further in view of Neumiller (US Patent No. 5,716,921), hereinafter "Neumiller '921".

Neumiller '681 teaches the features as described above. Neumiller '681, however, fails to specifically disclose disodium cocoamphodipropionate as the amphoteric surfactant.

Neumiller '921 teaches, in an analogous art, the equivalency of disodium capryloamphodipropionate with disodium cocoamphodipropionate as amphoteric surfactants (see col. 3, line 54 to col. 4, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute capryloamphodipropionate with disodium cocoamphodipropionate because the substitution of art recognized equivalents as shown by Neumiller '921 is within the level of ordinary skill in the art.

9. Claims 2, 11-12, 15-16, 23-28, 37-38, 47-50, 55-56, 62-63, 65, 67-68, 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings (EP 0,527,625).

Cummings teaches a glass cleaning composition comprising 0.05 to 1.5% ethylene glycol monohexyl ether, 0.01 to 2% surfactant, 0 to 15% cosolvent and water (see abstract). The cosolvent is especially a mixture of a polar low and polar high boiling organic solvent (see page 4, lines 11-14). The low boiling cosolvent is present in an amount of from 0 to about 10%, preferably in an amount of 0.1 to 8%, and the preferred low boiling cosolvent is isopropyl alcohol (see page 4, lines 15-19). The high boiling organic cosolvent is typically present in an amount of from 0 to 10%, preferably in an amount of 0.1 to about 5%, and an example is propylene glycol (see page 4, lines 20-35). Generally, the total solvent level present in the composition, including the ethylene glycol monohexyl ether and all cosolvents, will not exceed about 15% by weight of the composition, preferably will be less than about 10% by weight of the composition, and most preferably less than about 7% by weight of the composition (see page 4, lines 36-38). Anionic, nonionic, amphoteric and zwitterionic surfactants, or mixtures thereof (see page 3, line 48) are suitable in the composition of the present invention and are present in an effective cleaning amount, typically from about 0.001 to about 2% by weight of the composition (see page 4, lines 47-50). Examples of anionic surfactants are alkyl and alkylaryl sulfate and sulfonates (see page 4, lines 52-Typically the pH of the composition is between about 3.5 to about 6.5 when an acidic composition is desired, and between about 7.5 to about 11.5 when an alkaline composition is desired (see page 6, lines 14-17). The amount of pH modifying agent is between about 0.01 to about 2%, and an example is monoethanolamine (see page 6, lines 18-26). Various optional constituents may be incorporated in the compositions, one of which is builders like

polyacrylic acid (see page 6, lines 29-41; page 13, line 35). The ethylene glycol monohexyl ether of Cummings should have a limited solubility in water of less than 20% and reduces surface tension of the composition to less than 40 dynes/cm because same compounds have been utilized. Cummings, however, fails to specifically disclose a composition comprising an amphoteric surfactant, and the combination of amphoteric and anionic surfactants, and the VOC content of the composition which is less than 4% by weight, or 3, or about 1% by weight or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate an amphoteric surfactant or the combination of anionic and amphoteric surfactants to the glass cleaning composition because Cummings suggests their combination as suitable surfactants in the composition.

With respect to the VOC content of the composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 627 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578,16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,456,105 USPQ 233,235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because

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the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*; 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MFEP 2131.03 and MPEP 2144.051.

10. Claims 2, 12, 16, 24, 26, 28, 36, 38, 48, 50, 56, 67 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael (US Patent No. 5,540,864).

Michael teaches an aqueous, liquid hard surface detergent composition which comprises 0.18 wt% Cocoamidopropyl-dimethyl-2-hydroxy-3-sulfopropylbetaine (amphoteric surfactant); 0.02 wt% Sodium Alkyl ($-C_{13}$) Sulfate (anionic surfactant); 0.5 wt% monoethanolamine; 3.0 wt% propylene glycol monobutylether; 3.0 wt% isopropanol and balance deionized water and minors, (see Example 1, Formula No. 6, col. 12, lines 29-45), wherein the pH is adjusted to about 10.9 (see col. 13, line 21). Michael also teaches the equivalency of propylene glycol monobutylether with other glycol ethers such as monoethyleneglycolmonohexyl ether (see col. 7, lines 6-15). The balance of the composition is typically water and non-aqueous polar solvents like isopropanol, propylene glycol and mixtures thereof, and the level of the nonaqueous polar solvent is from about 0.5% to about 40%, preferably from about 1% to about 10% and the level of water is from about 50% to about 99% (see col. 8, lines 14-24) . Michael, however, fails to specifically disclose a composition comprising ethylene glycol n-hexyl ether, and propylene glycol, and the VOC content of the composition which is about 1% by weight or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute propylene glycol monobutylether in Formula 6 of Example 1 with monoethyleneglycolmonohexyl ether because the substitution of art recognized equivalents is within the level of ordinary skill in the art as shown by Michael and to incorporate propylene glycol with isopropanol because mixture of these solvents is suggested by Michael.

With respect to the VOC content of the composition which is about 1% by weight or less, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 627 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578,16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,456,105 USPQ 233,235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257,191 USPQ 90 (CCPA 1976; *In re Woodruff*; 919 F.2d 1575,16USPQ2d 1934 (Fed. Cir. 1990). See MFEP 2131.03 and MPEP 2144.051.

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11. Claims 10, 14, 20, 22, 36, 46, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael as applied to the above claims, and further in view of "Neumiller '921".

Michael teaches the features as described above. Michael, however, fails to specifically disclose disodium cocoamphodipropionate as the amphoteric surfactant.

Neumiller '921 teaches, in an analogous art, that disodium cocoamphodipropionate is an amphoteric surfactant (see col. 3, line 54 to col. 4, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the amphoteric surfactant of Michael with disodium cocoamphodipropionate because the substitution of art recognized equivalents as shown by Neumiller '921 is within the level of ordinary skill in the art.

12. Claims 9-10, 13-14, 19-22, 35-36, 45-46, 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings as applied to the above claims, and further in view of "Neumiller '921".

Cummings teaches the features as described above. Cummings, however, fails to specifically disclose disodium cocoamphodipropionate as the amphoteric surfactant.

Neumiller '921 teaches, in an analogous art, that disodium cocoamphodipropionate is an amphoteric surfactant (see col. 3, line 54 to col. 4, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the amphoteric surfactant of Cummings with disodium cocoamphodipropionate because the substitution of art recognized equivalents as shown by Neumiller '921 is within the level of ordinary skill in the art.

13. Claims 2, 11-12, 15-16, 23-28, 37-38, 47-50, 55-56, 62-65, 67-68, 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conway (WO 99/11123).

Conway teaches an aqueous cleaning composition for cleaning, disinfecting, and inhibiting mold and mildew growth on a non-porous hard surface (see abstract) which comprises an aliphatic alcohol, a glycol ether or ethers, and optionally, a secondary alcohol selected from the group consisting of monohydric alcohols, dihydric alcohols, trihydric alcohols and polyhydric alcohols at a pH in the range of from about 4.0 to about 13.0 (see page 4, lines 29-34). The composition may also contain other conventional materials including surfactants, pH modifiers, etc. (see page 4, line 34 to page 5, line 1). Typically the aliphatic alcohol is utilized in an amount of up to about 10%, preferably from about 1.0% to about 10.0% by weight of the composition and the preferred aliphatic alcohol is isopropanol (see page 5, lines 7-15). Suitable glycol ethers include ethylene glycol n-hexyl ether and are generally present in the range from about 0.01 to about 10.0 total weight percent (see page 6, lines 1-19). Preferred secondary alcohol is propylene glycol (see page 7, lines 32-33), and is generally employed in the range of up to about 5.0%, preferably from about 0.1% to about 3.5% by weight of the composition (see page 8, lines 1-3). The composition typically has a pH of about 4 or above, more

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preferably from about 7 to about 13 (see page 8, lines 5-7). The compositions are typically water-based (see page 8, lines 11-21). The compositions may contain one or more surfactants to adjust the surface tension of the composition to aid in cleaning and these surfactants include anionic surfactants such as sodium dodecyl benzene sulfonate and sodium lauryl sulfate and amphoteric surfactants like capryloamphodipropionate (see page 9, lines 1-27). The surfactants will be employed in the range from 0 to about 5.0%, preferably in the range of from about 0.01% to about 3.0% by weight of the composition (see page 10, lines 1-4). The formulator may also include a cleaning solvent or cleaning supplement such as monoethanolamine in amounts from 0 to 2.0%, preferably from about 0.01% to about 1.0% by weight of the composition (see page 10, lines 6-10). Thickening agents may also be utilized and include polyacrylic acid polymers and copolymers (see page 10, lines 12-16). Conway, however, fails to specifically disclose an aqueous cleaning composition which comprises ethylene glycol n-hexyl ether, amphoteric and anionic surfactants, isopropanol, propylene glycol or monoethanolamine in amounts as those recited and wherein the composition has a VOC content which is 4% by weight or less.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare an aqueous cleaning composition which comprises ethylene glycol n-hexyl ether, amphoteric and anionic surfactants, isopropanol, propylene glycol or monoethanolamine in their optimum proportions because the teachings of Conway encompass these ingredients and proportions.

With respect to the VOC content of the composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 627 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578,16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,456,105 USPQ 233,235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257,191 USPQ 90 (CCPA 1976; *In re Woodruff*; 919 F.2d 1575,16USPQ2d 1934 (Fed. Cir. 1990). See MFEP 2131.03 and MPEP 2144.051.

14. Claims 9-10, 13-14, 19-22, 35-36, 45-46, 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conway as applied to the above claims, and further in view of Neumiller (US Patent No. 5,716,921), hereinafter "Neumiller '921".

Conway teaches the features as described above. Conway, however, fails to specifically disclose disodium cocoamphodipropionate as the amphoteric surfactant.

Neumiller '921 teaches, in an analogous art, the equivalency of disodium capryloamphodipropionate with disodium cocoamphodipropionate as amphoteric surfactants (see col. 3, line 54 to col. 4, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute capryloamphodipropionate with disodium cocoamphodipropionate because the substitution of art recognized equivalents as shown by Neumiller '921 is within the level of ordinary skill in the art.

15. Claims 11, 15, 23, 25, 27, 37, 49, 55, 62-65, 68 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael as applied to the above claims, and further in view of Conway.

Michael teaches the features as described above. Michael, however, fails to specifically disclose the incorporation of acrylic polymer or acrylic copolymer.

Conway teaches the features as described above. In particular, Conway teaches the incorporation of thickening agents such as polyacrylic acid polymers or copolymers into compositions for cleaning glass surfaces where there is a need to increase the time the consumer can wipe the composition before it runs down a vertical surface (see page 10, lines 12-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate polyacrylic acid polymers or copolymers into the compositions of Michael because this would provide sufficient cling on a vertical surface as taught by Conway.

16. Claims 11, 15, 23, 25, 27, 37, 47, 49, 55, 62-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumiller '681 as applied to the above claims, and further in view of Conway.

Neumiller '681 or Michael teaches the features as described above. Neumiller '681, however, fails to specifically disclose the incorporation of acrylic polymer or acrylic copolymer.

Conway teaches the features as described above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate polyacrylic acid polymers or copolymers into the compositions of Neumiller '681 because this would provide sufficient cling on a vertical surface as taught by Conway.

17. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings as applied to the above claims, and further in view of Conway.

Cummings teaches the features as described above. Cummings, however, fails to specifically disclose an acrylic copolymer.

Conway teaches the features as described above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the polyacrylic acid polymer of Cummings with acrylic copolymer because the substitution of art recognized equivalents as shown by Conway is within the level of ordinary skill in the art.

18. Claims 2, 9, 11-13, 15-16, 19, 21, 23-28, 35-38, 45, 47-50, 55-57, 62-65, 67-68, 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters et al. (US Patent No. 5,534,198), hereinafter "Masters".

Masters teaches an aqueous liquid hard surface detergent composition having improved cleaning and good filming/streaking characteristics after rewetting and comprising: (A) from about 0.001% to about 2% by weight of detergent surfactant selected from the group consisting of: (1) an amphocarboxylate detergent surfactant (2) a zwitterionic detergent surfactant (3) an anionic detergent surfactant, and (4) mixtures thereof; (B) from about 0.5% to about 15% by weight of hydrophobic solvent having a hydrogen bonding parameter of from about 2 to about 7.7; (C) alkaline material to provide a pH, measured on the product, of from about 9 to about 12; (D) from about 0.01% to about 0.3% by weight of substantive polymer that makes glass more hydrophilic, in an effective amount to provide an improvement in spotting/filming after at least three rewettings of the glass, said polymer being selected from the group consisting of polycarboxylate polymers having a molecular weight of from about 10,000 to about 3,000,000, and sulfonated polystyrene polymers having a molecular weight of from about 10,000 to about 1,000,000; and E) the balance being an aqueous solvent system comprising water and optionally, non-aqueous polar solvent with only minimal cleaning action selected from the group consisting of methanol, ethanol, isopropanol, ethylene glycol, polypropylene glycol, glycol ethers having a hydrogen bonding parameter of greater than 7.7, and mixtures thereof (see claim 1). The alkaline material

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is monoethanolamine (see claim 9). One selection of solvent (B) is ethyleneglycolmonoethyl ether (see claim 11). The cosurfactant is an anionic detergent selected from the group consisting of C₁₂₋₁₈ alkyl sulfates, C₁₂₋₁₈ paraffin sulfonates, C₁₂₋₁₈ acylamidoalkylene sulfonates, and mixtures thereof (see claim 22). The preferred polycarboxylate polymers are those formed by polymerization of monomers, at least some of which contain carboxylic functionality, and common monomers include acrylic acid, maleic acid, ethylene, vinyl pyrrolidone, methacrylic acid methacryloylethylbetaine, etc. (see col. 10, lines 15-19). Masters, however, fails to specifically disclose a composition comprising ethylene glycol n-hexyl ether, amphoteric surfactant, isopropanol, monoethanolamine, and propylene glycol or acrylic polymer or copolymer, the composition having a VOC content as those recited.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared a composition comprising ethylene glycol n-hexyl ether, amphoteric surfactant, isopropanol, monoethanolamine, and propylene glycol or acrylic polymer or copolymer in their optimum proportions because the teachings of Masters encompass these ingredients.

With respect to the proportions of the recited ingredients and the VOC content of the composition, it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the

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optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness. See *In re Boesch*, 627 F.2d 272,276,205 USPQ 215,219 (CCPA 1980). See also *In re Woodruff* 919 F.2d 1575, 1578,16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,456,105 USPQ 233,235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257,191 USPQ 90 (CCPA 1976; *In re Woodruff*; 919 F.2d 1575,16USPQ2d 1934 (Fed. Cir. 1990). See MFEP 2131.03 and MPEP 2144.051.

19. Claims 10, 14, 20, 22, 46, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masters as applied to the above claims, and further in view of "Neumiller '921".

Masters teaches the features as described above. Masters, however, fails to specifically disclose disodium cocoamphodipropionate as the amphoteric surfactant.

Neumiller '921 teaches, in an analogous art, that disodium cocoamphodipropionate is an amphoteric surfactant (see col. 3, line 54 to col. 4, line 19).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the amphoteric surfactant of Masters with disodium cocoamphodipropionate because the substitution of art recognized equivalents as shown by Neumiller '921 is within the level of ordinary skill in the art.

Response to Arguments

20. Applicants' arguments filed September 15, 2008 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Neumiller '681, Applicants argue that it would not have been obvious to one of ordinary skill in the art at the time of the invention to incorporate an amphoteric surfactant or the combination of anionic and amphoteric surfactants as asserted by the examiner to adjust the surface tension of the composition as taught by Neumiller '681 and obtain applicants' claimed composition, and that the examiner's assertion is possible only through hindsight of knowing applicants' desirable combination.

In response to applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In col. 5, lines 40-48, Neumiller '681 teaches that the aqueous glass cleaning composition may also contain one or more surfactants to adjust the surface tension of the composition which includes anionic surfactants and amphoteric surfactants.

With respect to the obviousness rejection based upon Cummings, Applicants argue that Cummings does not teach or suggest a cleaning composition including an

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amphoteric surfactant in combination with the claimed VOC content and the claimed defined solvent, i.e., a low-volatile non-VOC evaporative organic solvent that has limited solubility in water of less than 20% and reduces surface tension of the composition to less than 40 dynes/cm. Applicants also argue that Cummings does not teach the inclusion of an alkanolamine as a co-solvent in a combination as claimed, and that no suggestion is present to one skilled in the art to selectively modify these elements to provide the properties claimed to achieve the composition as claimed.

The Examiner respectfully disagrees with the above arguments because, as stated above, Cummings teaches each of the ingredients having overlapping proportions as those required in the present claims, hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a glass cleaning composition comprising ethylene glycol monohexyl ether, surfactant mixture like amphoteric surfactant and anionic surfactant, water, monoethnaolamine, and cosolvent in their optimum proportions because the teachings of Cummings at least in page 3, lines 47-50; page 4, lines 47-51; and claim 1, encompass these combination of ingredients and proportions.

With respect to the obviousness rejection based upon Conway, Applicants argue that there is no guidance or suggestion to pick or choose select components and select amounts to achieve a defined VOC content in order to achieve the particular combination claimed by applicants.

The Examiner respectfully disagrees with the above arguments because Conway teaches each of the ingredients having overlapping proportions as those recited in the

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present claims. Applicants have not provided any showing of criticality with respect to their specific ingredients having specific proportions when compared to similar components as those taught by Conway.

Conclusion

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796